

## **DISCUSSION**

Upon entry of the present amendment, Claims 1-29 remain in the application, of which, claims 1, 5, 13, 20, 24 and 25 are independent.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Applicant requests reconsideration and withdrawal of the rejection, for reasons which are outlined hereinbelow.

### **Drawing issues**

Applicant encloses herewith substitute drawing sheets for Figures 1, 2, 4, 5, 6 and 18-19. Figure 2 is modified to include a lead line between "a" and the arrow. Figure 4 has been modified to show the acceleration sensor 15. Figure 19 has been modified to change the reference number for the closed local circle region to be 6-0 so that it will not conflict with the use of reference numeral 6 in Figure 7.

No new matter is added by these changes, since the subject matter thereof was expressly or inherently disclosed in the application as filed.

As regards the Examiner's objection to the drawings for allegedly not showing the protrusion section pushed into the interior space prior to expansion such that the protrusion section is turned inside out as claimed in claims 5 and 24, applicant respectfully disagrees with this objection since the claimed feature is illustrated in Figure 11, and is described in the specification on page 15, lines 15-19 of the original specification. Additionally, the specification is amended to provide an express antecedent basis for the language of claims 5 and 24.

Based on the foregoing the objections to the drawings are believed to be

overcome, and it is respectfully requested that the objection be reconsidered and withdrawn.

#### **Section 112 issues**

At item 6 of the Office Action, the Examiner has rejected claims 2-3, 12, 19, and 21-22 under 35 USC 112, second paragraph, as being indefinite.

Applicant has made several changes to the claims and specification to clarify the language and to adopt the Examiner's suggestions, such that the rejection under 112 is believed to be overcome.

Applicant therefore respectfully requests reconsideration and withdrawal of the Examiner's rejection of claims 2-3, 12, 19, and 21-22 under 35 USC 112, second paragraph.

#### **New Matter issues**

In item 4 of the above-identified Office Action, the Examiner objects to certain changes to the specification and claims 2 and 21 made in Amendment-B as constituting impermissible new matter. Applicant has deleted the language to which the Examiner objected, and has also amended the specification to indicate that the sensor 15 is "schematically shown" pursuant to the Examiner's suggestion. Applicant therefore respectfully requests reconsideration and withdrawal of the Examiner's new matter objections.

#### **Section 103 issues**

1. At item 8 of the Office Action, the Examiner has rejected claims 1-3, 6-12, and 20-22 under 35 USC 103(a) as being unpatentable over JP 10-175,497 (hereinafter referred to as '497), in view of JP 49-116743 (hereinafter referred to as '743). With respect to claims 1 and 20, the Examiner states that '497 discloses an air bag apparatus comprising an acceleration sensor, an inflator, an airbag which is initially folded and expands with gas. The Examiner further states that '743 discloses an airbag which includes a protrusion section 3 on a main section 2 extending outwardly from a tip or top portion of the main section such that the inner

spaces of the main section and the protrusion section are connected, and that the protrusion section 3 has at least one opening. The Examiner considers it to be obvious to modify '497 to include a protrusion section as taught by '743 in order to relieve pressure as the occupant falls into the bag. As regards claims 2 and 21, the Examiner states that the protrusion section 3 of '743 has openings at opposed ends: one opening to the atmosphere and one to the main section 2, and the protrusion is semi-cylindrical. As regards claims 3 and 22, the Examiner states that the protrusion section 3 is more narrow than the tip of the main section 2, and has at least one opening at its end opposite the main section 2. The Examiner also considers '497 to disclose the features recited in claims 6-12.

Additionally, at item 9 of the Office Action, the Examiner has rejected claims 4-5 and 23-24 under 35 USC 103(a) as being unpatentable over JP 10-175,497 (hereinafter referred to as '497), in view of '743 as applied to claim 1, and further in view of JP 8-268213. The Examiner states that it would have been obvious to modify '497 and '743 to include the protrusion section pushed into the main section inner space prior to the expansion in order to store the protrusion compactly before inflation of the bag.

#### Applicant's Response

Upon careful consideration and in light of the above amendments to the claims, including independent claims 1, 5, 20 and 24, applicant respectfully submits that the discussed rejections are overcome and that present claims 1-12, and 20-24 are clearly patentably distinct over the applied references because the references do not disclose or suggest features of the claimed invention.

For example, while the '743 reference may disclose a cylindrical exhaust pipe extending outwardly from the airbag so that the longitudinal axis of the pipe is normal to the surface of the airbag, this is in contrast to the claimed invention wherein the protrusion section extends tangentially to the tip portion of the main section and in a direction orthogonal to an

expansion direction of the air bag as now required by claims 1, 5 and 24. In addition, the exhaust pipe disclosed in '743 is positioned so as to lie at an intermediate location of the airbag, for example, between the gas inlet and the wall of the airbag opposed to the gas inlet. This is in contrast to the requirement of claims 1, 5 and 24 that the tip portion of the main section, to which the protrusion section is connected, is disposed at an opposite end of the main section from the end receiving gas from the inflater.

Moreover, applicant respectfully submits that the above distinctions are significant because the air bag including the discussed features can be more efficiently expanded to its final shape.

Also, as previously argued, the applied references do not include or make obvious features of the dependent claims, including a protrusion section in a pipe shape with openings at opposite ends, as set forth in claims 2 and 21; the shapes and other characteristics of the partitions as now further defined in the dependent claims, etc.

Based on the foregoing the rejections of claims 1-12, and 20-24 under 35 USC 103(a) are believed to be overcome, and it is respectfully requested that the rejections be reconsidered and withdrawn.

2. At item 10 of the Office Action, the Examiner has rejected claims 13-19 and 25 under 35 USC 103(a) as being unpatentable over '497 in view of JP 10-338097 (hereinafter referred to as '097). The Examiner states that it would have been obvious to modify '497 to include the bag expanding with the gas substantially in parallel to a linear expansion direction as taught in '097 Figure 18 wherein the bag expands upwardly in a linear direction, in order to deploy the bag from an alternative location.

#### Applicant's Response

Upon careful consideration and in light of the above amendments to the claims, including independent claims 13 and 25, applicant respectfully submits that the discussed

rejections are overcome and that present claims 13-19 and 25 are clearly patentably distinct over the applied references because the references do not disclose or suggest features of the claimed invention; and because the proposed modification of the references is improperly based on a suggestion coming entirely from the Examiner (guided by impermissible hindsight of applicant's disclosure), rather than from any motivation which may be fairly gleaned from the references themselves.

As amended above, claims 13 and 25 now require that the partition(s) determine the shape of the air bag during an expansion process, thereby facilitating high speed expansion of the air bag to a final shape thereof. As explained in the specification, these features involve determination of the expansion direction by using strategically placed and shaped partition(s), whereas these important features are not taught or suggested by the '497 and '097 references.

Also, the applied references do not include or make obvious features of the dependent claims, including the shapes and other characteristics of the partitions as now further defined in the dependent claims, etc.

Moreover, applicant respectfully submits that the reason cited by the Examiner for making the modification does not actually come from the references themselves, but from the Examiner as guided by impermissible hindsight of applicant's disclosure. That is, neither reference teaches providing an alternative location for deployment of the airbag. Thus, it is respectfully submitted that the Examiner is using hindsight acquired from the applicant's disclosure to suggest modification of '497 as taught by '097. The '497 reference clearly teaches an airbag position on the seat back, and further clearly teaches an airbag having a thorax protecting portion, and a head protecting portion above the thorax protecting portion. Thus '497 does not teach a linear expansion direction, such that there is no motivation to modify '497 to have a linear expansion direction.

Based on the foregoing the rejection of claims 13-19 and 25 under 35 USC 103(a) is

believed to be overcome, and it is respectfully requested that the rejection be reconsidered and withdrawn.

### Conclusion

Applicant respectfully suggests that none of the references of record, considered either singly or in any combination, teach applicant's invention, as presently claimed, and that further, skill generally available in the art would not lead to a person of ordinary skill to create applicant's claimed invention, using the references of record.

Applicant respectfully suggests that as currently amended, all of the pending claims are believed to be allowable.

No new matter has been added by the present amendment, since all of the pertinent subject matter was expressly or inherently disclosed in the original application.

For all of the above mentioned reasons, applicant requests reconsideration and withdrawal of the rejection of record, and allowance of all the pending claims.

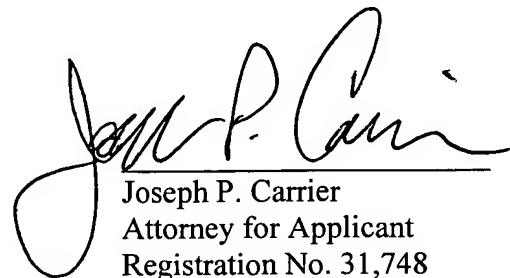
If the Examiner is not fully convinced of all of the claims now in the application, applicant respectfully requests that the Examiner telephonically contact applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable reconsideration is respectfully requested.

Respectfully submitted,

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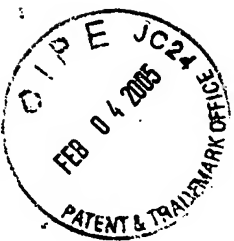
## **IN THE DRAWINGS**

Please accept the enclosed Figures 1, 2, 4-6, 18 and 19 in place of the previously submitted Figures 4-6, 18 and 19.

In Figure 2, an appropriate lead line has been added to associate reference symbol “a” with the arrow adjacent thereto.

In Figure 4, the acceleration sensor 15 has been added as requested by the Examiner.

In Figure 19, an appropriate reference number and lead line have been added to designate the closed local circle region 6-0, which was previously shown but not explicitly referenced in the drawing.



ANNOTATED DRAWING  
with AMENDMENT-C  
02 February 2005  
10/055,844

Fig. 1 PRIOR ART

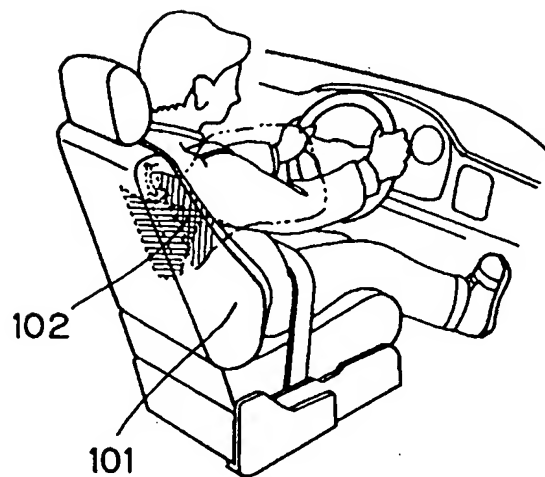
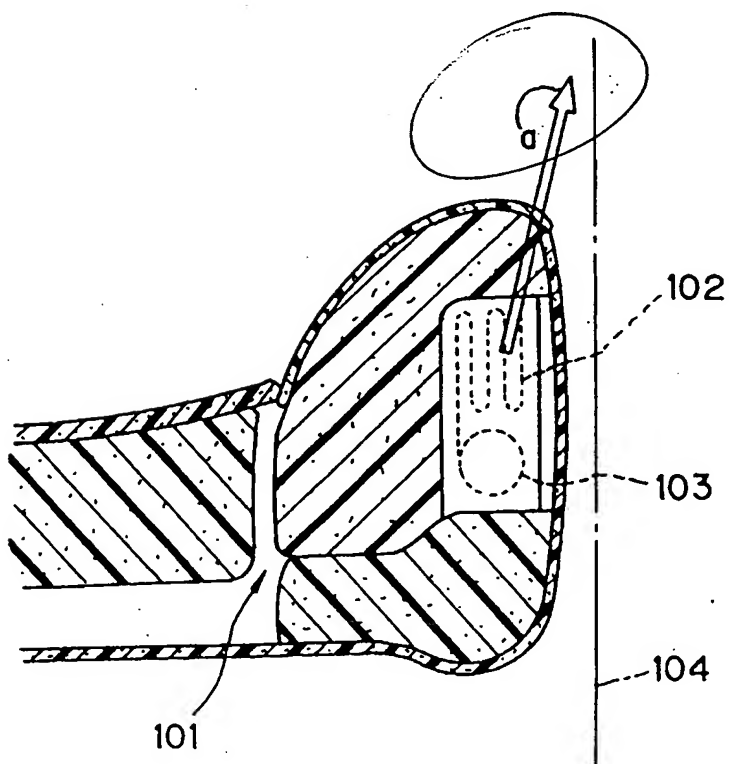
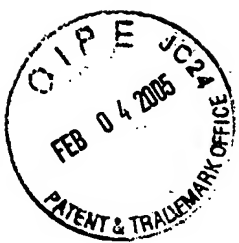


Fig. 2 PRIOR ART







ANNOTATED DRAWING  
with AMENDMENT-C  
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Fig. 4

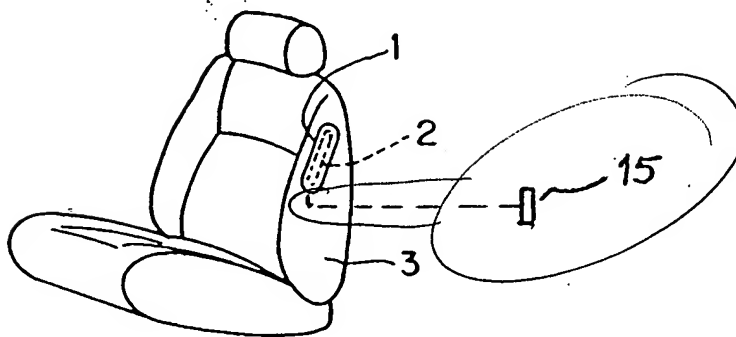


Fig. 5

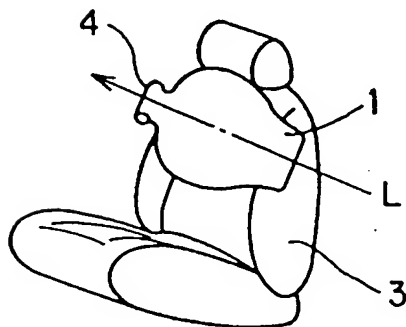
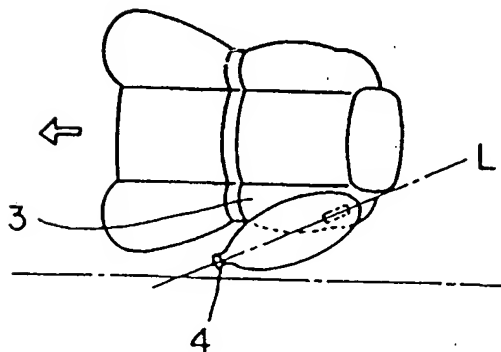
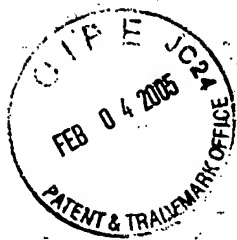


Fig. 6





ANNOTATED DRAWING  
with AMENDMENT-C  
02 February 2005  
10/055,844

Fig. 18

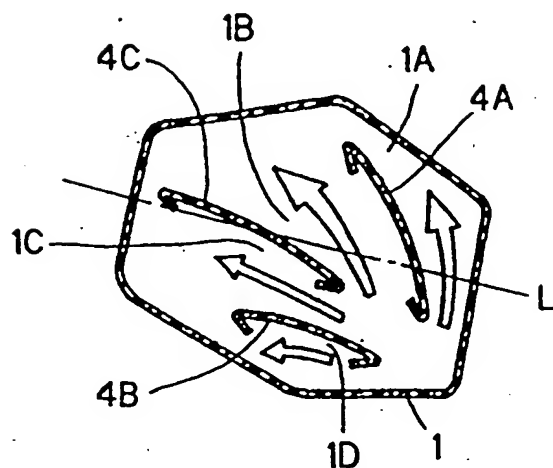


Fig. 19

